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DO WE HAVE ENOUGH WATER?

LCRA-SAWS Water Project:
Planning for Our Region's Future Water Needs

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Future water shortages are a reality. A proposal now being studied would meet shortages in the lower Colorado River basin and help the San Antonio region meet some of its future water needs.

The Problem: Not Enough Water

The number of people in the Lower Colorado Region (Region K) will double by 2060. Most of this growth will be in Austin and surrounding counties. As growing urban cities and rural communities need more water, less surface water will be available from the Colorado River and Highland Lakes for other uses.

- Agriculture – especially rice farming – will lack up to one-third of the surface water it needs.
- As demands increase over time, less surface water will flow into Matagorda Bay.
- Average lake levels will be lower in lakes Buchanan and Travis.

These shortages could hurt the basin's economy and natural resources:

- Less surface water for rice farmers could hurt the industry and the 4,000 jobs and \$234 million it generates annually for the basin's economy.
- Fishing and tourism industries could be harmed if the flow of surface water to the bay or estuaries significantly declines over time.
- Lake-related recreation that draws millions of dollars to the basin each year could be affected by lower lake levels.

Overcoming future surface water shortages can be done, but it will be expensive.

The Solution: Sharing Water Resources

Region K isn't alone. The South Central Texas Region (Region L) next door also faces water shortages. Region L includes fast-growing San Antonio, now the seventh-largest city in the nation.

San Antonio has an aggressive and highly effective water conservation program but it won't be enough, due to growth and federal restrictions on using groundwater from the environmentally sensitive Edwards Aquifer.

During the 2000 regional planning process, Region L identified a dozen ways to meet its shortages by taking groundwater and surface water supplies from the lower Colorado River basin.

Instead of a long, costly fight over the Colorado River, Region K, through the Lower Colorado River Authority (LCRA), and Region L, through the San Antonio Water System (SAWS), decided to work together to find a solution.

The result is a proposal to meet Region K's future water shortages and some of Region L's, too. San Antonio would pay to conserve and develop water supplies in the Colorado River basin. And the

basin's interests and natural resources would be protected.

The Proposal: Planning for the Future

The proposal has three strategies to conserve and develop water in the basin to meet shortages, maintain the health of Matagorda Bay, and keep average levels of the Highland Lakes higher than they would be without the project.

1. Conserve, or prevent loss of, surface water used for irrigation in Colorado, Wharton and Matagorda counties. For example:

- Improve canals and other irrigation facilities.
- Level fields with laser technology.
- Plant more water-efficient rice.

2. Capture and store unused and excess river flows in one or more holding basins in the lower three counties.


3. Use a limited amount of groundwater together with surface water for irrigation.

- Use groundwater in the irrigation divisions when surface water can't meet demands.
- Limit the amount of groundwater that can be used and comply with state and local groundwater regulations.
- Use groundwater only for irrigation in the lower three counties – no groundwater would be sent to San Antonio.

No more than 150,000 acre-feet* of surface water a year would be sent by pipeline to San Antonio. The water sale contract between LCRA and SAWS



Irrigated agriculture in the lower Colorado River basin will see a decrease in available water supplies as the region's population grows.

Timeline for Study Phase	2000	2001	2002
	Region K and Region L water planning groups identify future water shortages during a regional water planning process created by the Texas Legislature and the Texas Water Development Board.	LCRA and SAWS agree to study a proposed water supply project that would benefit both regions. Texas Legislature adopts HB 1629 to set legal protections that must be met before the project can proceed.	LCRA and SAWS sign a water supply contract, subject to study phase findings. LCRA holds public meetings in the basin in January and December to identify public concerns and define an in-depth study plan.

would expire no later than 80 years after the project begins. After the contract expires, the water supplies would stay in the Colorado River basin to help meet growing water demands.

No groundwater would be sent to Region L and San Antonio as a result of this project.

SAWS has agreed to fund the project's costs and pay for the surface water. These revenues could enable LCRA to stabilize and perhaps lower the future cost of surface water in the basin. Without the project, higher rates would be needed to pay the cost of meeting the basin's future water needs.

* *An acre-foot equals 325,851 gallons.*

Legal Protections for the Basin

Before the project can proceed, it must meet legal protections set by the Texas Legislature in 2001. House Bill 1629 says the project must:

- Protect and benefit the lower Colorado River basin and LCRA's water service area, including cities, industries, agriculture, recreation and the environment.
- Be consistent with regional water plans filed with the Texas Water Development Board.
- Ensure the river's inflows are adequate to maintain Matagorda Bay's ecological health and productivity.

Study Areas

- ◆ Agricultural conservation in LCRA's irrigation divisions
- ◆ Groundwater for agriculture in LCRA's irrigation divisions
- ◆ Water quality in the Colorado River and one or more proposed holding basins
- ◆ Colorado River's aquatic habitat and state threatened species, such as the blue sucker fish
- ◆ Matagorda Bay health
- ◆ Lake and river water availability
- ◆ Facility siting, design and potential effects on the environment
- ◆ Social and economic benefits and costs
- ◆ Federal, state and local permits required for implementation

- Provide instream flows no less protective than current flows under a state-approved water management plan.
- Benefit stored water levels in LCRA's existing reservoirs.
- Ensure that San Antonio has a drought contingency plan and a highly effective water conservation plan.
- Provide for a broad public and scientific review process that ensures all information that can be reasonably developed is considered in setting beneficial inflow and instream flow provisions.

Studies of the Proposed Project

LCRA and SAWS are conducting a six-year study period to find out if the project makes sense – technically, environmentally and financially. The studies also are researching the project's potential environmental impact to the lower Colorado River and Matagorda Bay.

Technical experts are conducting the studies and their findings are being reviewed by an independent panel of scientists and research experts in the areas

being studied. The public can access the study results at www.lcra.org/lswp and send written comments to LCRA.

The studies will provide important data about the basin's water supplies and environmental needs, the river's socio-economic value, and the project's impact. SAWS is funding the \$42 million study phase unless the project does not proceed, in which case LCRA and SAWS would share the cost.

LCRA and SAWS have agreed that the proposed project will not proceed if the studies show:

- Costs are too high.
- Not enough water is available.
- It does not meet the legal protections set by the Texas Legislature.

Mitigation

The study phase will identify options to mitigate, or offset, adverse impacts from constructing, operating and maintaining the project. This could include impacts to the environment, groundwater supplies and property tax revenues, for example.

2004

2006

2007

2010 - 2015

Six years of technical studies begin to research the project's potential environmental, financial, water supply and socio-economic impacts.

LCRA holds water town hall meetings in the basin in June.

LCRA holds public open houses in the basin in May.

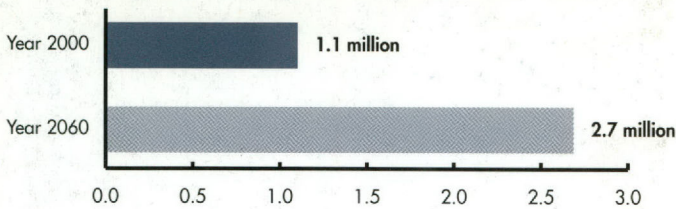
Draft permit application to be submitted to U.S. Army Corps of Engineers – federal process could take several years and will include public input.

Permit applications submitted to the Texas Commission on Environmental Quality and local groundwater conservation districts, and final permit information provided to the Corps of Engineers.

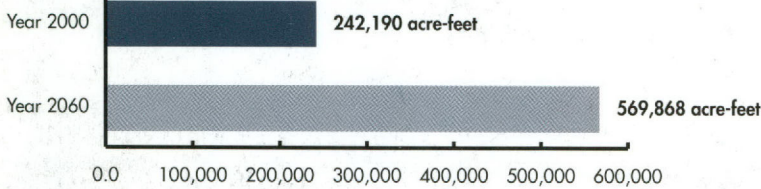
Studies, permits and implementation plan completed. Work may begin if LCRA finds the project is feasible and meets legislative protections and SAWS accepts the water supply, schedule and cost of the project.

Future Water Shortages in Region K

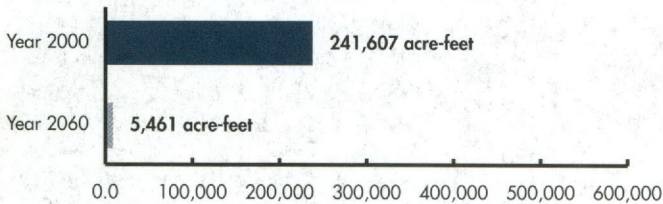
Region K's population growth ... ¹



And growing municipal and industrial demands ... ²

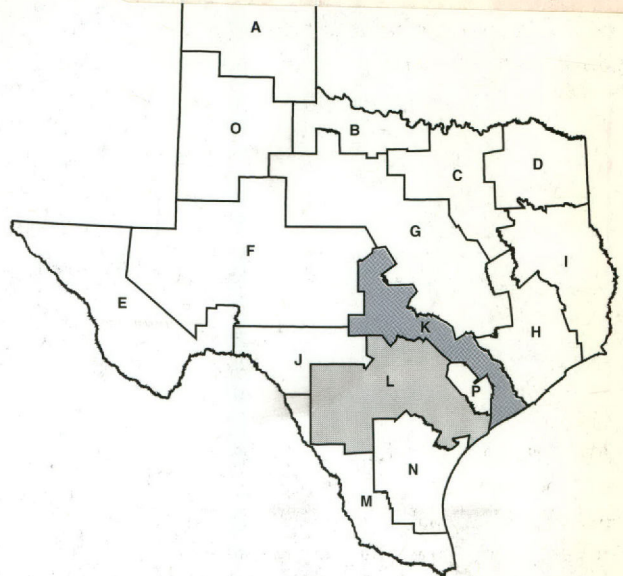


Mean less water from the Highland Lakes for agriculture. ³



Sources

- ¹ Executive Summary, Page 4, 2006 Region K Water Plan.
- ² Chapter 2, Page 1, 2006 Region K Water Plan.
- ³ Chapter 4, Page 107, 2006 Region K Water Plan.



Surface water in Texas rivers and lakes belongs to the people of Texas and is regulated by the state. Regional planning groups identify the state's future water shortages and develop strategies to meet them.

Volunteer members of regional planning groups represent diverse, often conflicting interests such as cities, industries, agriculture and the environment.

The lower Colorado River basin is in Region K; the San Antonio area is in Region L.

Permit Applications

LCRA must have federal, state and local permits before construction can begin. LCRA and SAWS will begin the federal permitting process first. The process can take several years and includes an in-depth environmental review and public input.

A Fair Solution

The viability of the proposed project is still being studied but it appears to be a good solution and a fair deal for two regions facing future water shortages. If it goes forward, the proposed project would benefit the lower Colorado River basin by:

- Protecting the basin's interests and natural resources.
- Funding measures to develop long-term water supplies for the basin's cities, industries and agriculture.

- Protecting the Colorado River's instream flows and providing fresh-water inflows to maintain Matagorda Bay's ecological health and productivity.
- Sustaining higher average water levels in lakes Buchanan and Travis than would exist without the project.

The project also would benefit San Antonio by helping to meet the city's shortages until the LCRA-SAWS contract expires in 80 years at the latest. This gives Region L ample time to develop new water supplies for the future.

Learn More

LCRA and SAWS invite you to get involved and learn more about the proposed LCRA-SAWS Water Project. Contact LCRA by phone, letter or e-mail to request regular updates and public meeting notices.



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Information in this document may change as study findings are reported.